IN THE CLAIMS

Please amend claims 1, 3, 9, 11, 17, 19, 23 and 27, and cancel claims 18 and 28 as follows.

Claim 1 (Currently Amended): An electron emitter assembly, comprising:

a light source configured to emit light;

a housing having a light receiving window configured to allow light from the light source to pass therethrough;

a photo-responsive device disposed in the housing configured to receive the light passing through the light receiving window, the photo-responsive device operably coupled to an electron emitter device, the ~~photo-responsive device~~ photo-responsive device applying a voltage to the electron emitter device in response to receiving the light to induce ~~inducing~~ the electron emitter device to emit electrons ~~in response to receiving the light~~; and

an anode disposed in the housing, the anode receiving the emitted electrons from the electron emitter device.

Claim 2 (Original): The electron emitter assembly of claim 1, wherein the anode is configured to emit x-rays in response to receiving the emitted electrons from the electron emitter device.

Claim 3 (Currently Amended): The electron emitter assembly of claim 2, wherein ~~further comprising:~~

~~a housing having a light receiving window configured to allow light from the light source to pass therethrough, the photo-responsive device and the anode being disposed in the vacuum housing wherein the photo-responsive device is positioned to receive the light from the light source,~~ the ~~vacuum~~ housing further ~~comprising~~ comprises an x-ray transmissive window being disposed in an aperture extending through a wall of the housing, wherein the anode emits x-rays through the x-ray transmissive window in response to receiving the emitted electrons from the electron emitter device.

Claim 4 (Original): The electron emitter assembly of claim 1, wherein the electron emitter device comprises a field emitter array.

Claim 5 (Original): The electron emitter assembly of claim 1, wherein the light source comprises a laser.

Claim 6 (Original): The electron emitter assembly of claim 1, further comprising a mirror configured to receive light from the light source and to reflect the light towards the photo-responsive device.

Claim 7 (Original): The electron emitter assembly of claim 6, wherein the mirror can rotate about at least two axes.

Claim 8 (Original): The electron emitter assembly of claim 1, wherein the photo-responsive device comprises one of a photodiode and a photo-transistor.

Claim 9 (Currently Amended): An electron emitter assembly, comprising:

a light source configured to emit light;

a housing having a light receiving window configured to allow light from the light source to pass therethrough;

a plurality of photo-responsive devices disposed in the housing configured to receive the light passing through the light receiving window and a plurality of electron emitter devices disposed in the housing, each photo-responsive device being operably coupled to a corresponding electron emitter device, each photo-responsive device applying a voltage to the electron emitter device to induce ~~inducing~~ the corresponding electron emitter device to emit electrons in response to the photo-responsive device receiving at least a portion of the light; and

an anode disposed in the housing receiving the emitted electrons from each of the electron emitter devices.

Claim 10 (Original): The electron emitter assembly of claim 9, wherein the anode is configured to emit x-rays in response to receiving the emitted electrons from the electron emitter device.

Claim 11 (Currently Amended): The electron emitter assembly of claim 10, wherein ~~further comprising:~~

~~a housing having a light receiving window configured to allow light from the light source to pass therethrough, the photo-responsive device and the anode being disposed in the vacuum housing wherein the photo-responsive device is positioned to receive the light from the light source,~~ the ~~vacuum~~ housing further ~~comprising~~ comprises an x-ray transmissive window being disposed in an aperture extending through a wall of the housing, wherein the anode emits x-rays through the x-ray transmissive window in response to receiving the emitted electrons from the electron emitter device.

Claim 12 (Original): The electron emitter assembly of claim 9, wherein each electron emitter device comprises a field emitter array.

Claim 13 (Original): The electron emitter assembly of claim 9, further comprising a mirror configured to receive light from the light source and to reflect the light towards at least one of the photo-responsive devices.

Claim 14 (Original): The electron emitter assembly of claim 13, wherein the mirror can rotate about at least two axes to reflect the light over a predetermined region to sequentially or randomly induce the plurality of photo-responsive devices to emit electrons.

Claim 15 (Original): The electron emitter assembly of claim 9, wherein each photo-responsive device comprises one of a photodiode and a phototransistor.

Claim 16 (Original): The electron emitter assembly of claim 9, wherein the light source comprises a laser.

Claim 17 (Currently Amended): An electron emitter assembly, comprising:

a first light source configured to emit light having a first wavelength;

a second light source configured to emit light having a second wavelength;

first and second photo-responsive devices operably coupled to an electron emitter device, the electron emitter device including a first electron emitter subassembly and a second electron emitter subassembly, the first photo-responsive device inducing the first electron emitter subassembly to emit electrons in response to receiving the light having the first wavelength, the second photo-responsive device inducing the second electron emitter subassembly to emit electrons in response to receiving the light having the second wavelength; and

an anode receiving the emitted electrons from the electron emitter device, the anode is configured to emit x-rays in response to receiving the emitted electrons from the electron emitter device.

Claim 18 (Cancelled).

Claim 19 (Currently Amended): The electron emitter assembly of claim ~~18~~ 17, further comprising:

a housing having a light receiving window configured to allow light from the light source to pass therethrough, the photo-responsive device and the anode being disposed in the ~~vacuum~~ housing wherein the photo-responsive device is positioned to receive the light from the light source, the ~~vacuum~~ housing further comprising an x-ray transmissive window being disposed in an aperture extending through a wall of the housing, wherein the anode emits x-rays through the x-ray transmissive window in response to receiving the emitted electrons from the electron emitter device.

Claim 20 (Original): The electron emitter assembly of claim 17, wherein the electron emitter device comprises a field emitter array.

Claim 21 (Original): The electron emitter assembly of claim 17, wherein each photo-responsive device comprises one of a photodiode and a phototransistor.

Claim 22 (Original): The electron emitter assembly of claim 17, wherein the light source comprises a laser.

Claim 23 (Currently Amended): A method for generating an electron beam utilizing an electron emitter assembly, the electron emitter assembly having a housing with a light receiving window configured to allow light from a light source to pass therethrough, the electron emitter assembly further having a photo-responsive device, an electron emitter device, and an anode disposed in the housing, the method comprising:

emitting light from the light source that passes through the light receiving window of the electron emitter assembly onto ~~a~~ the photo-responsive device operably coupled to ~~an~~ the electron emitter device; ~~and~~

applying a voltage from the photo-responsive device to the electron emitter device in response to the photo-response device receiving the light to induce ~~energizing~~ the electron emitter device to emit electrons towards ~~an~~ the anode ~~in response to the photo-responsive device receiving the light~~.

Claim 24 (Original): The method of claim 23, further comprising receiving the emitted electrons at the anode and generating x-rays at the anode in response to receiving the emitted electrons.

Claim 25 (Original): The method of claim 23, wherein the light comprises a laser light.

Claim 26 (Original): The method of claim 23, wherein the electron emitter device comprises a field emitter array.

Claim 27 (Currently Amended): A method for generating electron beams, comprising:

emitting light having a first wavelength onto a first photo-responsive device operably coupled to an electron emitter device, the electron emitter device having a first electron emitter subassembly and a second electron emitter subassembly;

energizing the first electron emitter subassembly to emit electrons towards an anode in response to the first photo-responsive device receiving the light having the first wavelength;

emitting light having a second wavelength onto a second photo-responsive device operably coupled to the electron emitter device; ~~and~~

energizing the second electron emitter subassembly to emit electrons towards the anode in response to the second photo-responsive device receiving the light having the second wavelength;

receiving the emitted electrons from the first electron emitter subassembly at the anode and emitting x-rays from the anode in response to the anode receiving the emitted electrons from the first electron emitter subassembly; and

receiving the emitted electrons from the second electron emitter subassembly at the anode and emitting x-rays from the anode in response to the anode receiving the emitted electrons from the second electron emitter subassembly.

Claim 28 (Cancelled).

Claim 29 (Original): The method of claim 27, wherein each photo-responsive device comprises one of a photodiode and a phototransistor.